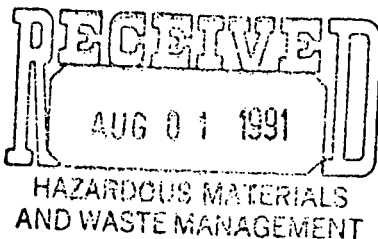




Department of Energy

ROCKY FLATS OFFICE  
P.O. BOX 928  
GOLDEN, COLORADO 80402-0928

JUL 31 1991



Mr. Martin Hestmark  
U.S. Environmental Protection Agency, Region VIII  
ATTN: Rocky Flats Project Manager, 8HWM-RI  
999 18th Street, Suite 500, 8WM-C  
Denver, Colorado 80202-2405

6171-DOE-91

Mr. Gary Baughman  
Hazardous Waste Facilities Unit Leader  
Colorado Department of Health  
4210 East 11th Avenue  
Denver, Colorado 80220

Gentlemen:

Please find enclosed a copy of the selection criteria for contaminants of concern (COCs) for human health at the Rocky Flats Plant (RFP). These criteria were developed by the Risk Assessment Technical Working Group comprised of U.S. Environmental Protection Agency (Region VIII), Colorado Department of Health the U.S. Department of Energy (DOE) personnel. The COCs will be used in the baseline risk assessments for all operable units (OUs) at the RFP. Contaminants of concern will also be important for risk assessments conducted for Corrective Measures Studies/Feasibility Studies at the RFP.

The Interagency Agreement delivery date for the draft RCRA Facility Investigation/Remedial Investigation Report is July 30, 1992. In order to meet this deadline we need to initiate the baseline risk assessment immediately. The COC criteria are a critical pathway for the baseline risk assessment.

We request that you provide DOE with written approval of the COC selection criteria so that we may begin the baseline risk assessment for OU 1. Note that this approval mechanism was discussed and agreed to at the June 25, 1991, Risk Assessment Technical Working Group meeting.

ADMIN RECORD


A-OU01-000933

Mr. Hestmark  
Mr. Baughman

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Should you have any questions or concerns, you may contact Bruce Thatcher of my staff at 966-3532.

Sincerely,

  
David P. Simonson  
Assistant Manager  
for Environmental Management

Enclosure

cc w/Enclosure:

F. Lockhart, DOE/RFO  
R. Schassburger, DOE/RFO  
B. Thatcher, DOE/RFO  
D. Smith, EG&G/RF

Preliminary Approach to Identifying Contaminants  
of Concern (COC's) for Human Health Risk Assessment

Approach

Analytical domain is the Site-Specific Chemical Analysis  
Roster (S-SCAR)

- 1) Data validation
- 2) Data reduction
- 3) Data usability evaluation for risk assessment
- 4) Identification of COC's by media

Considerations for Identification of COC's \*

Consideration as site-specific,  
waste-activity related compounds

Concentration vs Chemical-Specific ARAR's

Detection frequency: > 5%

Detects in "Hot Spots"

Comparison with background: > 95% Upper Tolerance  
Limit

Potential carcinogenic compound classified as:

Group A; sufficient evidence of  
carcinogenicity in humans

Group B1; limited evidence of carcinogenicity  
in humans

Group B2; sufficient evidence in animals with  
inadequate evidence in humans

Compounds not presenting potential carcinogenic  
risk:

Derived media concentrations (DMC's, e.g.  
DWEL's) > (Exposure dose/RfD) / 10

Inter-media transport, persistence and  
biometabolic characteristics

Consideration as nutrients

## Decay and degradation products

\* Potential COC's derived from Step 3 will be evaluated against all considerations in an iterative process. Thus, while a chemical may be eliminated as a COC on one criteria, it may subsequently be identified as a COC based on another criteria (and vice-versa).